CLIFFORD

World-Class Auto Security™

Arrow II

Owner's Manual

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Standard Features of the Arrow II

☑ *Lifetime Warranty* —For as long as you own the car, Clifford will repair or replace the control unit and remotes free of charge (see the warranty card for details).

☑ *FACT™—False Alarm Control and Test* — One of many patented Clifford innovations, FACT ***absolutely, positively ends recurring false alarms.***

☑ *A Pair of 2-button/3-Channel Remote Controls* —Fingertip command from a typical range of 100 feet.

☑ *AntiScan™* — Some car thieves use *"scanners"* that transmit one digital code after another until they hit the one code that disarms the alarm. AntiScan blocks scanners to prevent disarming by anyone other than you.

☑ *Anti-CodeGrabbing™ (ACG) Capability*— A code-grabber lets a thief record off the air the digital code transmitted by your remote control whenever you arm your car. When you leave, the thief replays the code to disarm the alarm and unlock your car's doors. Fortunately, your system's control unit already has Clifford's unbeatable Anti-CodeGrabbing (ACG) technology built into its receiver. Just add an optional 4-button/12-channel ACG remote control to make code-grabbers completely useless. With Clifford's unique ACG, each time you use the remote control ***a different random code*** is transmitted, yet your system will flawlessly recognize and respond to your transmitter's new code and ignore all others.

☑ *Full-Time Remote Panic with Automatic Door Locking/Unlocking*— If you feel threatened, you can, with just a fingertip touch on your remote control, sound the siren, flash the parking lights and unlock your vehicle's power door locks for quick entry into your car without fumbling with your keys. If you press the panic button while driving, the siren will sound, the lights will flash and the doors will lock to shield you from the assailant (some vehicles require optional relays to control the power locks).

☑ *Dual-Mode Chirp Muting*— You can silence the usual arm/disarm chirp confirmations on the go and without any pre-planning with just a press of both buttons on the remote control. Or you may choose to silence them on a long-term basis until you decide to turn them back on.

☑ *Built-In Parking Light Flasher* — Visually confirms door lock and system status.

☑ *Remote Courtesy Lighting Capability* — For your safety and convenience, when you remotely disarm Arrow II, the interior lights turn on and stay on until you start the engine or 30 seconds, whichever occurs first (requires an optional relay).

Standard Features of the Arrow II (cont.)

☑ *Remote Door Lock/Unlock Capability* — *No more fumbling with keys in the dark or bad weather!* A press of a button on the remote control simultaneously arms your system and locks your vehicle's power locks. Another press disarms and unlocks (some vehicles require optional relays).

☑ *Enhanced User-Selectable AutoArming™* — Automatically arms itself *"passively"* if you forget. May qualify you for an insurance discount that could pay for the system (consult your insurance company).

   ■ *AutoArming Enable/Disable* — You may disable or re-enable AutoArming with just a few flicks of a switch.

   ■ *AutoArm & Lock™* — You may set the system to automatically lock the doors every time the system AutoArms.

   ■ *Visual Indication* — Two parking lights flashes signal that the 30-second countdown to AutoArming has started.

   ■ *Instant AutoArm Bypass* — Just two quick turns of the ignition switch will bypass AutoArming for one cycle — perfect when fueling the vehicle. AutoArming is automatically restored the next time you park your vehicle.

☑ *Piezo Sensor™* — An all-electronic, solid-state vibration/impact sensor that delivers the utmost reliability and provides more accurate discrimination between genuine intrusion attempts and non-threatening conditions (like a large truck passing by) that cause other sensors to false alarm.

☑ *Advanced CMOS Microcomputer* — Very large scale integration (VLSI) microprocessor commands and monitors all system functions, yet it draws less power than the vehicle's clock, so it won't deplete your car battery like other alarms.

☑ *AutoTesting™* — Tests all triggers and sensors every time you arm and warns you if you accidentally arm the system with the door, hood or trunk open. If there is a genuine trigger or sensor malfunction, the system will alert you whether the problem is a trigger or sensor.

☑ *Patented Malfunction AutoBypass™* — In the unlikely event of a trigger or sensor malfunction, your Arrow II will automatically bypass the malfunction and arm all other points to continue relentless protection of your vehicle.

☑ *TotalRecall™* — Arrow II's memory stores the identity of the last trigger or sensor activated. This provides an invaluable diagnostic means, since, whenever you wish, the system will visually identify the last activated trigger or sensor.

Standard Features of the Arrow II *(cont.)*

☑ *Prior Intrusion Attempt Alert* — When you disarm your Arrow II, a special chirp and parking light flash sequence will audibly and visually alert you from a distance if an intrusion attempt was foiled while you were away.

☑ *Patented Remote Control Code Learning* — A few flicks of a switch lets you match to the system up to three different Clifford remote controls, including the optional 3-channel and/or 12-channel Anti-CodeGrabbing remote controls for the ultimate protection against thieves with code-grabbers. Just as easily, a lost or stolen remote control can be deleted from the system memory.

☑ *Fault-Proof Starter Interrupt*— Your Arrow II system prevents an intruder from starting the engine, but lets you start it even in the unlikely event of a system malfunction.

☑ *High-Output Siren* — *Loud* siren wail. Arrow II also has Clifford's Patented Automatic Noise Abatement feature that limits alarm sounding to no more than 3 minutes even if a door is left open in the wake of an intrusion attempt. This ensures against battery drain or towing of your vehicle due to noise pollution. The system then automatically resets and re-arms all other points to provide the utmost possible protection.

☑ *Hood/Trunk Trigger Input*— For full perimeter protection of the engine compartment and trunk contents (may require optional pin switches).

☑ *High-Luminescence LED Status Indicator* — Adds visual deterrence and identifies system status.

☑ *Valet Mode* — Permits vehicle servicing and valet parking without relinquishing your remote control.

☑ *Patented SmartPowerUp™ II* — When power to the system is disconnected, the system's non-volatile memory always remembers the last state (armed, disarmed or valet mode) and returns to that state when power is restored. So if a thief disconnects the power and then restores it in an attempt to start the car, the system will re-arm and instantly sound the siren while immobilizing the vehicle.

Welcome to the world of high-technology vehicle security and convenience

Congratulations on the purchase of your Arrow II. Clifford Electronics has long been recognized as the world's leading manufacturer of high-technology vehicle security systems. Buying Clifford has always meant buying the best. In fact, Clifford Electronics holds more patents than all other vehicle security manufacturers combined. You will find your Arrow II system amazingly easy to use: never more difficult than a flick of a switch or a press of a button on one of your keychain remote controls.

Your 2-button/3-channel remote controls

The 2-button/3-channel remote controls are miniature radio transmitters each powered by a tiny 12-volt battery. Range is up to 100 feet (a weak remote control battery will reduce range). The 2-button/3-channel remote control is the key to your system. You will use your remote control to arm and disarm the system, lock* and unlock* the doors, activate the panic feature, command options such as a remote trunk release, headlight activation, power window operation, or other accessory.

TO ARM THE SYSTEM	Press button I once. You will hear **two chirps** and the parking lights will flash twice. The dashboard LED will flash repeatedly and the car doors will automatically lock.*
TO DISARM THE SYSTEM	Press button I again. **One chirp** and one parking light flash confirms disarming. In addition, the doors will automatically unlock* and the interior lights will turn on* and stay on for 30 seconds or until you start the engine, whichever occurs first.
TO <u>SILENTLY</u> ARM OR DISARM . . .	Simultaneously press *both* buttons I and II to transmit channel 3. The system will arm or disarm with all the indications noted above *except* the chirp acknowledgments.
TO REMOTELY OPEN THE TRUNK OR TO ACTIVATE A DIFFERENT OPTION .	Button II can control a remote trunk release or other optional accessory, such as headlight activation feature of the NightVision Headlight Automation System, remote power window operation via the SmartWindows accessory, or operate your garage door opener via Clifford's Garage Door Receiver.
TO ACTIVATE THE PANIC FEATURE	Press button I for 3 seconds. The parking lights will flash and the siren will blare for 30 seconds, or until you press button I again to turn it off. If the ignition is on (indicating you are in the car), the doors will lock* to prevent an assailant from entering. If the ignition is off, the doors will unlock,* allowing you to enter immediately without fumbling with your keys.

* Some vehicle require optional relays.

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Optional Anti-CodeGrabbing™ (ACG™) remote control(s)

ACG is an optional Clifford exclusive that protects you and your automobile from the most effective and onerous car stealing device ever used by car thieves — a code-grabber. Code-grabbers literally record, from hundreds of feet away, the code sent by your car alarm remote control. Then the thief simply plays back the code when you're gone, instantly disarming the alarm and unlocking the doors. Your Arrow II is ACG-compatible. All you need is one or more optional Clifford 4-button/12-channel ACG remote controls. These ACG remote controls use complex digital signal processing and unbreachable encryption to randomly change the digital code every time you use the remote control. Your remote will never transmit the same code twice, and the control unit will never accept the same code twice.

What's more, the additional channels of the ACG remote control can be used to command yet another remote vehicle accessory (such as the IntelliStart™ remote engine/heater/air conditioning starter), can be used to remotely enter and exit valet mode (see page 8), can be used to command a multi-door electric garage door/entry gate opener (#60-128/ACG), and can be programmed to operate Clifford systems on your other vehicles.

How to interpret the chirps and parking light flashes

When you use the remote control, the system responds with chirps and parking light flashes. *These chirp/flash acknowledgments mean:*

Chirps and flashes	Meaning
1	Your system is disarmed *or* you have remotely exited valet mode (see page 8)
2	Your system is armed *or* you have remotely engaged valet mode (see page 8)
2 and then 4	Armed but there is a door open or the sensor is malfunctioning (see *AutoTesting* on page 8)
3	Disarmed but there was an intrusion attempt while you were away (see *Prior intrusion attempt* on page 8)
4	Armed but the door, hood or trunk is ajar (see *AutoTesting* on page 8)

FACT™— False Alarm Control and Test

With FACT, you'll never experience repeated false alarms. If the Insignia Siren goes off, DO NOT remotely disarm the system; allow it to run for the full siren duration. Before sounding the siren a second time, the system automatically checks for another activated trigger to verify that an intrusion is in progress. Should the siren sound again, you will know for sure that someone is tampering with your vehicle. (To disable FACT, see *User-selectable features* on page 10.)

Piezo Sensor™

The Piezo Sensor detects intrusion-related vibrations and impacts. For an even greater level of security, consider an optional Clifford Electronics Glass Tampering Sensor, detects any attempts to break any of the vehicle windows.

Enhanced AutoArming™

If this feature is enabled and you forget to remotely arm, the system automatically arms itself 30 seconds after the vehicle doors are closed. For your convenience, if you re-open any door(s) within the 30-second countdown, AutoArming will restart from the beginning once all doors are closed. Arrow II has these additional features:

- ■ *AutoArming enable/disable:* If you prefer, you may deactivate or reactivate the AutoArming feature. See *User-selectable features* on page 10.

- ■ *Visual acknowledgment:* Five seconds after you exit the vehicle and close all the doors, the parking lights will flash twice to confirm that the AutoArming countdown is progressing. Then, 25 seconds later, the system will AutoArm.

- ■ *AutoArm & Lock:* To ensure you can't accidentally lock your keys inside the car, the system is factory-set not to lock the doors upon AutoArming. To change this setting, see *User-selectable features* on page 10.

- ■ *Instant AutoArming bypass:* Prevents AutoArming when fueling and other times when you wish to temporarily bypass AutoArming. To activate Instant AutoArming Bypass, rapidly turn the ignition switch to "ON" then "OFF" ***twice***. You'll hear a siren chirp to confirm that the system will not AutoArm. Your Arrow II will revert to normal operating mode when you next start the engine.

Valet mode

Whenever the system is put in valet mode, all of the system's security features are switched off. At various times, you will need to turn the system off. For instance, when having your car serviced, washed or parked by a valet.

> *NOTE: If you temporarily lose the use of your remote controls, you can disarm the system by enabling valet mode.*

To enable valet mode
1. Turn the ignition switch to its "ON" position or start the engine.
2. Flip the valet switch. The system's LED will glow continually for on-going visual confirmation of valet mode.

To exit valet mode
1. Turn the ignition switch to its "ON" position or start the engine.
2. Flip the valet switch. The system's LED will turn off to confirm that the system is in its normal operating mode.

Optional remote controlled valet mode entry and exit

You can even *remotely* enable or exit valet mode if you have an optional Clifford 4-button/12-channel ACG remote control. All you need to do is transmit channel 5 (one press of the side LevelShift button, then button 1). In addition to the previously noted indications, two parking light flashes will confirm that you have remotely enabled valet mode, while a single flash confirms exiting of valet mode.

Keyless entry in valet mode

Even in valet mode, you can still remotely convenience features. Press button 1 as if you were disarming and the doors will unlock* (indicated by one parking light flash) and the interior light will turn on*. Press button 1 again and the doors lock* (confirmed by two flashes). Button 2 can activate an option such as a remote trunk release.

How to interpret the LED status indicator

The LED on your car's dashboard or console will inform you of the system status:

LED Condition	Meaning
Off	System is disarmed and in normal operating mode (i.e., valet mode is off)
On	Valet mode is on, the vehicle can be driven or serviced without the remote control
Flashing	System is armed and protecting your vehicle

AutoTesting™

Each time you remotely arm your Arrow II, it automatically tests all system triggers and sensors. If the **hood, trunk or a door** is open when you remotely arm, the system will **immediately** alert you of the problem by sounding **4 chirps** and **4 parking light flashes** instead of the usual 2 and 2 (simply disarm, shut the hood, door or trunk and re-arm to reactivate monitoring of that trigger point). Please note that the door ajar warning will not work on vehicles with delayed courtesy lights.

> NOTE: Since this is a warning indication, you will hear the 4 chirps even if you "silently" arm with channel 3.

Automatic malfunction bypass

To provide protection even if a component malfunctions, the system automatically bypasses any faulty point and arms all *other* triggers and sensors until you can have the system serviced by your local Authorized Clifford Dealer.

Prior intrusion attempt alert

If you hear three chirps when you remotely disarm, it means that a trigger or sensor was activated in your absence.

Some vehicle require optional relays.

TotalRecall™

The system's memory records the identity of the last activated or malfunctioning trigger or sensor, which allows your installer to instantly track down a malfunction. To identify the trigger or sensor held in the system's memory, use the following procedure:

1. With the ignition OFF, flip the valet switch.
2. Press button I to "arm" the system, then again to "disarm."
3. The LED will blink 1–3 times to indicate the most recently activated trigger or sensor. For your convenience, the blink cycle will repeat a total of 5 times.
4. Write down the number of blinks between pauses and refer to the chart below.

Number of LED blinks between pauses	Trigger/sensor indication
1 blink	Piezo Sensor
2 blinks	Door trigger
3 blinks	Hood or trunk trigger

Fault-Proof starter interrupt

Your Arrow II will automatically prevent the engine from being started while the system is armed. Clifford's Fault-Proof design ensures that *you* can start the engine even in the unlikely event of a system malfunction.

High-output siren with remote controlled chirp muting

Sounds when the system detects an intrusion attempt or when panicked (see page 5).

Chirp Muting

Siren "chirps" confirm arming and disarming, but you have two options: remote chirp muting and long-term chirp silencing. Remote chirp muting is useful when parking in a quiet residential area or any other time when you want to arm or disarm silently. To do so, simultaneously press *both* buttons I and II on your remote control instead of the usual button I. The system will arm or disarm with all the usual indications except the siren chirp(s). Long-term chirp silencing lets you set turn off the chirps until you decide to turn them back on. Just use the programming procedure noted on page 10.

SmartPowerUp™ II

If power is ever removed, SmartPowerUp II ensures the system will automatically restore itself to its previous state when power is restored. So if a thief disconnects power and then restores it in an attempt to start the car, the system will re-arm and instantly sound the siren. If your vehicle is to be serviced by a mechanic, just put the system in valet mode (see page 8). If the mechanic needs to interrupt power, your system will automatically return to its valet mode state when power is restored; there will be no alarm activation and no need to provide your mechanic with your remote control and instructions on how to use it.

User-selectable features

Your Arrow II allows you to set many of its features to your own personal preferences. The system comes from the factory with all of its features pre-programmed as noted in the table below. To change any of the settings, use the following procedure. To restore the feature to its factory setting, just repeat the procedure:

1. Select the feature you wish from the table below. Note the number of of flicks.
2. Turn your vehicle's ignition switch to its "ON" position.
3. Immediately flip the valet switch back and forth the number of times noted for the feature you wish to program (to help you count, you will hear a single chirp confirmation each time you flick).
   a. If noted, perform the "Secondary action."
   b. If noted, wait for the "Program completion confirmation."
4. Turn the ignition off. Repeat steps 1-4 for any other feature you wish to program.

Feature	Factory setting	# of flicks	Secondary action	Program completion confirmation	Result
AutoArming	ON	**4**	—	1 chirp = OFF 2 chirps = ON	Change state from ON to OFF or vice-versa
AutoArm & Lock	OFF	**5**	—	1 chirp = OFF 2 chirps = ON	Change state from OFF to ON or vice-versa
Long-Term Chirp Silencing	OFF	**6**	—	1 chirp = ON 2 chirps = OFF	Change state from OFF to ON or vice-versa
FACT	ON	**12**	—	1 chirp = OFF 2 chirps = ON	Change state from ON to OFF or vice-versa
Add a new remote to channel 1 (arm/disarm)	—	**13**	Press remote control button I	1 chirp	Button I/channel 1 code of the new remote has been memorized
Add a new remote to channel 2 (remote accessory)	—	**14**	Press remote control button II	2 chirps	Buttons II/channel 2 code of the new remote has been memorized
Add a new remote to channel 3 (silent arm/disarm)	—	**15**	Simultaneously press both remote control buttons I+II (or button 3 of the optional ACG remote control)	3 chirps	Buttons I+II/channel 3 code of the new remote has been memorized
Add a new remote to channel 5 (remote controlled valet mode)	—	**17**	On the optional 12-channel remote, press LevelShift once, then press button 1 (channel 5)	5 chirps	Channel 5 code of the new remote control has been memorized
Erase all channels	—	**19**	Wait 3 seconds for the 2-chirp confirmation before turning the ignition off	2 chirps	All remote control codes have been erased; program in new remote controls

> *Example : To change the AutoArming feature from its factory setting of "on" to "off," you would do the following:*
>
> - Turn the ignition key to the ON position.
>
> - Immediately flip the valet switch back and forth 4 times (you'll hear a chirp each time you flip the switch back and forth to help you count to the total of 4 chirps).
>
> - Turn the ignition off. That's all there is to it! To change the AutoArming setting back, just repeat the procedure.

Adding new remote controls

For other drivers in your family, or if you wish to control Clifford systems on your other cars with the same remote control, you can buy additional remote controls from any Clifford Dealer (or call our Customer Service Department at 800-824-3208) and program them into the system yourself. Each Arrow II will respond to as many as three 3-channel and/or 12-channel ACG remote controls. To add a new remote control to the system, use the procedures noted in the *User-selectable features* section on page 10.

How to erase the codes of lost or stolen remote controls

If one of your remote controls is ever lost or stolen, you can erase its digital codes from the system memory to make sure that the missing remote control can never be used to disarm your system. To do so, use the "Erase all channels" feature (see *User-selectable features* on page 10). This will clear all remote control codes from the system memory. Then simply program each remaining and/or replacement remote control as noted in the *Adding new remote controls* section above.

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